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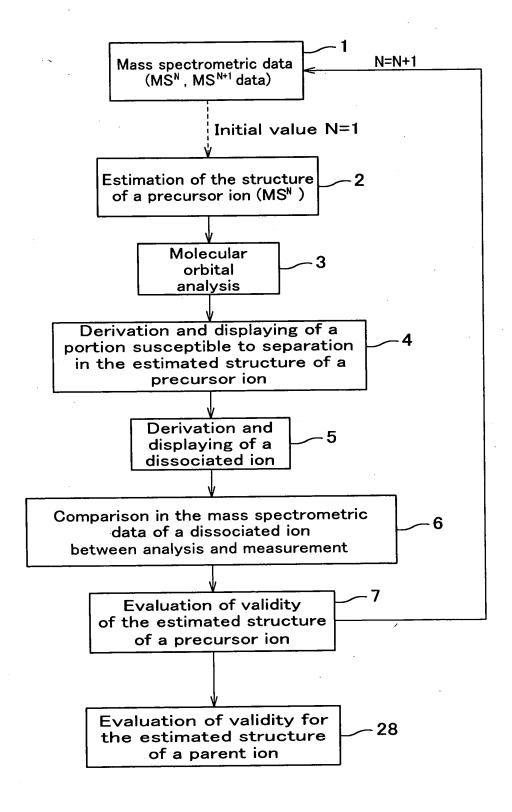
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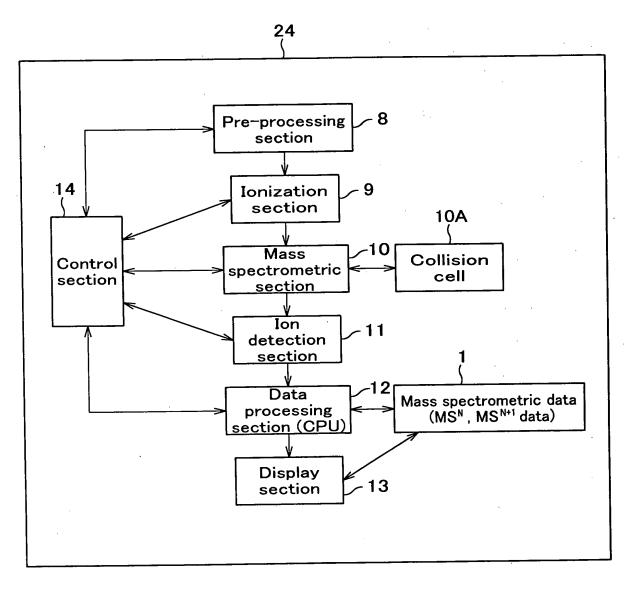
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FIG.1



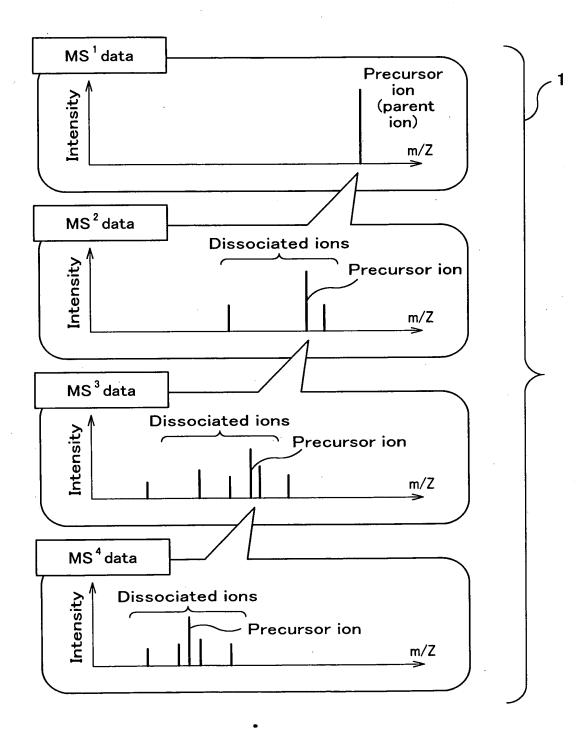
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FIG.2



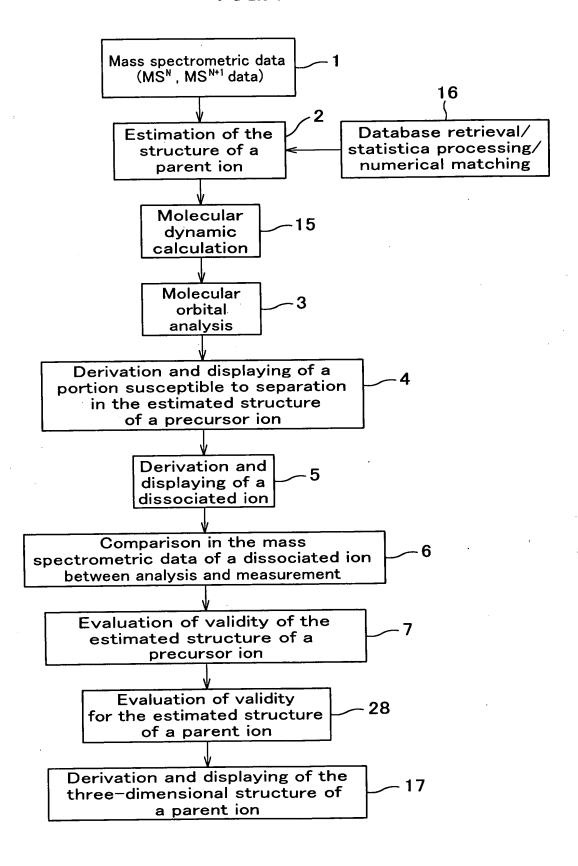
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FIG.3



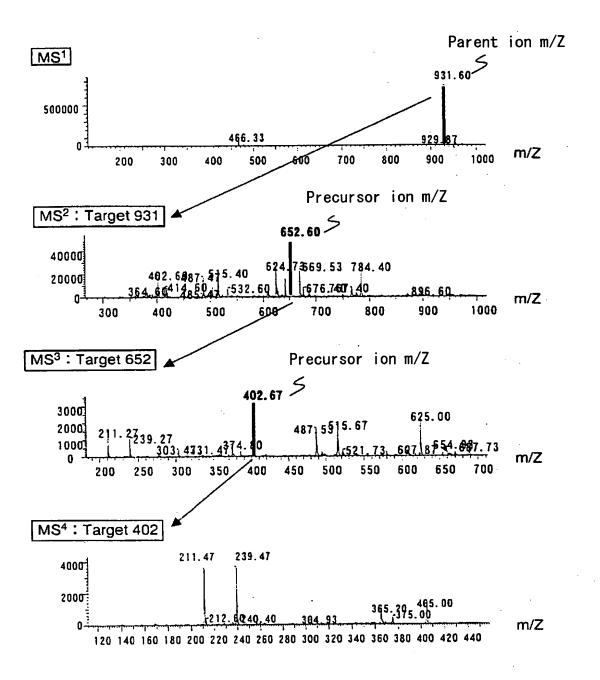
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FIG.4



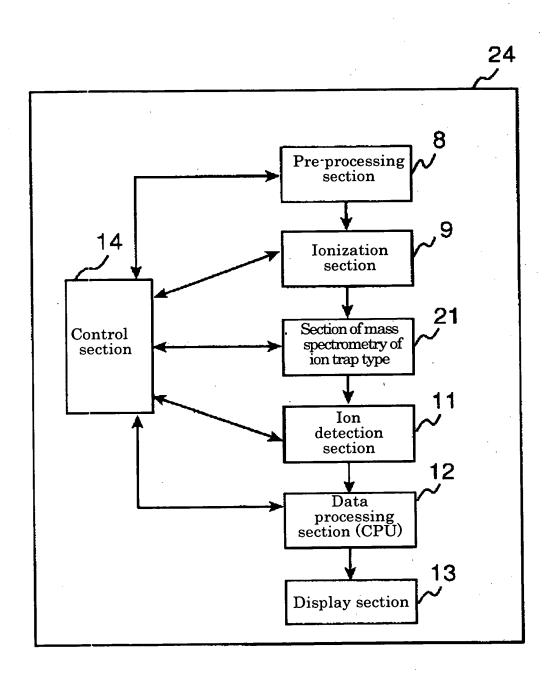
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FIG. 5



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FIG. 6



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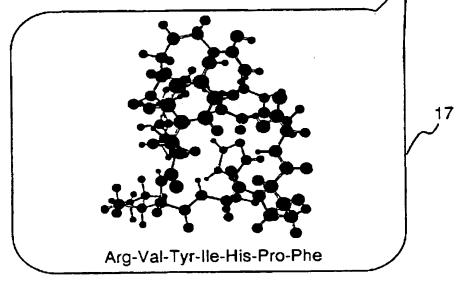
FIG. 7

Rank	Estimated amino acid sequences (N-terminal ← → C-terminal)						
1	Arg	Tyr	Val	Leu	His	Met	Leu
2	Arg	Tyr	Val	Leu	His	Met	Leu
3	Arg	Tyr	Val	lle	His	Met	Leu
4	Arg	Tyr	Val	Leu	His	Met	lle
5	Arg	Tyr	Val	lle	His	Met	lle
6	Arg	Tyr	Val	lle	His	Met	lle
7	Arg	Val	Tyr	lle	His	Met	Leu
8	Arg	Val	Tyr	Leu	His	Met	lle
9	Arg	Val	Tyr	Leu	His	Met	Leu
10	Arg	Val	Tyr	Leu	His	Met	Leu
.11	Arg	Val	Tyr	lle	His	Met	lle
12	Arg	Val	Tyr	lle	His	Met	lle
13	Arg	Tyr	Val	Leu	His	Asp	Glu
14	Arg	Tyr	Val	lle	His	Asp	Glu
15	Arg	Tyr	Val	Leu	His	Pro	Phe
16	Arg	Tyr	Val	lle	His	Pro	Phe
17	Arg	Val	Tyr	Leu	His	Asp	Glu
18	Arg	Val	Tyr	lle	His	Asp	Glu
19	Arg	Val	Tyr	Leu	His	Pro	Phe
20	Arg	Val	Tyr	lle	His	Pro	Phe

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F1G. 8

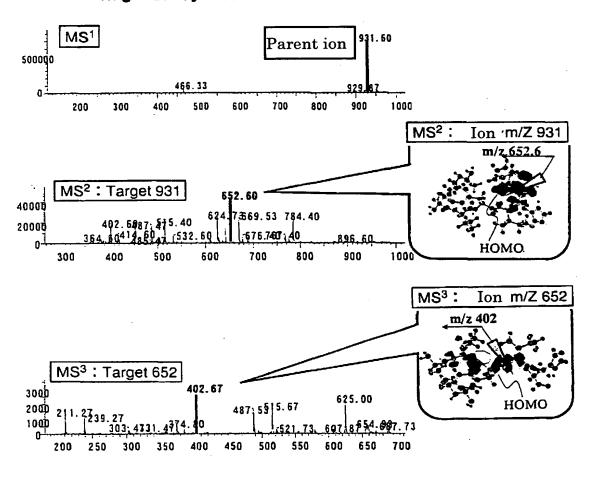
Rank	Estimated amino acid sequences (N-terminal← →C-terminal)							Ranking resulting from the method of invention
1,	Arg	Tyr	Val	Leu	His	Met	Leu	6
2	Arg	Tyr	Val	Leu	His	Met	Leu	7
3	Arg	Tyr	Val	lle	His	Met	Leu	13
4	Arg	Tyr	Val	Leu	His	Met	lle	8
5	Arg	Tyr	Val	ile	His	Met	lle	19
6	Arg	Tyr	Val	lle	His	Met	lle	20
7	Arg	Val	Tyr	lle	His	Met	Leu	12
8	Arg	Val	Tyr	Leu	His	Met	lle	5
9	Arg	Val	Tyr	Leu	His	Met	Leu	3
10	Arg	Val	Tyr	Leu	His	Met	Leu	4
11	Arg	Val	Tyr	lle	His	Met	lle	17
12	Arg	Val	Tyr	lle	His	Met	lle	18
13	Arg	Tyr	Val	Leu	His	Asp	Glu	. 16
14	Arg	Tyr	Val	lle	His	Asp	Glu	14
15	Arg	Tyr	Val	Leu	His	Pro	Phe	10
16	Arg	Tyr	Val	lle	His	Pro	Phe	2
17	Arg	Val	Tyr	Leu	His	Asp	Glu	15
18	Arg	Val	Tyr	lle	His	Asp	Glu	11
19	Arg	Val	Tyr	Leu	His	Pro	Phe	9
20	Arg	Val	Tyr	lle	His	Pro	Phe	1

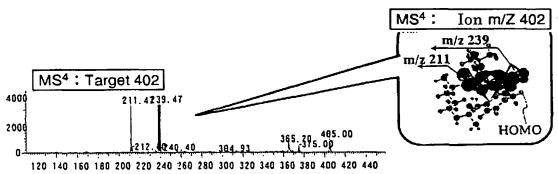


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FIG. 9

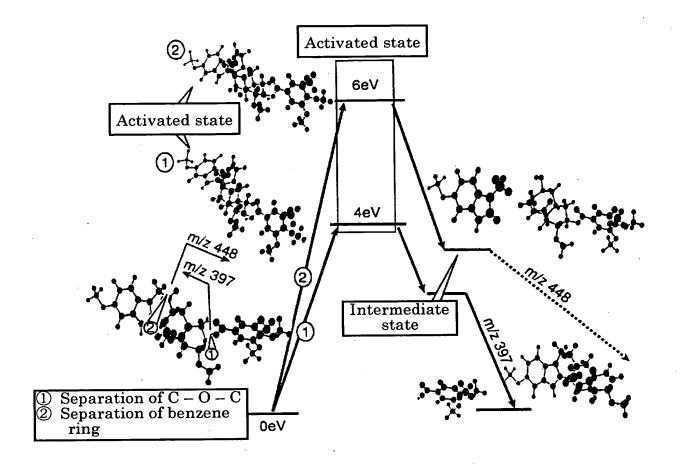
Arg-Val-Tyr-lie-His-Pro-Phe





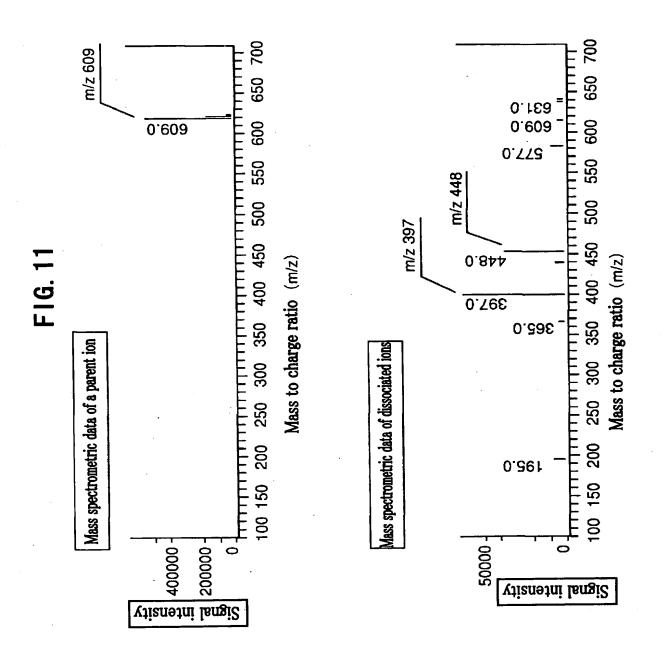
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FIG. 10



DECOMPOSING REACTION OF RECERPINE

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FIG. 12

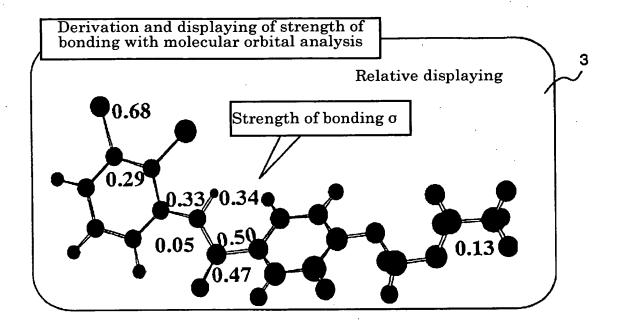
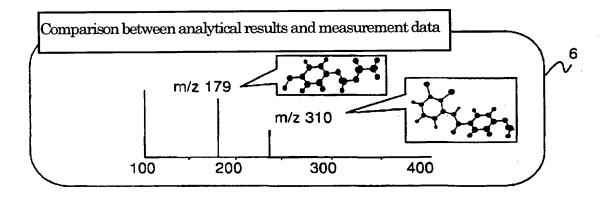


FIG. 13



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FIG. 14

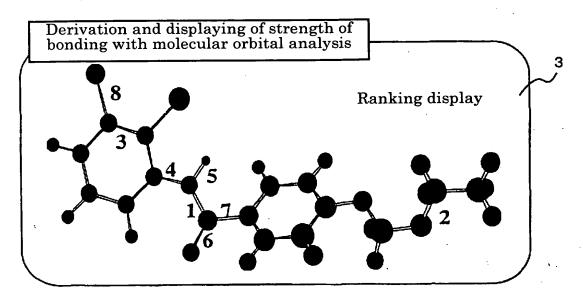
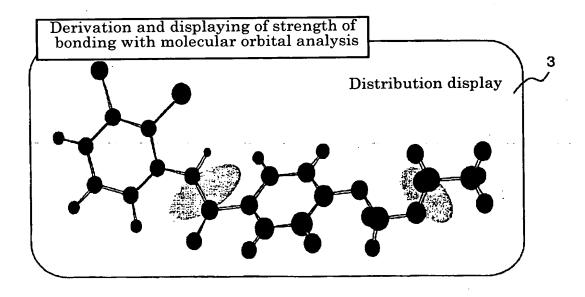
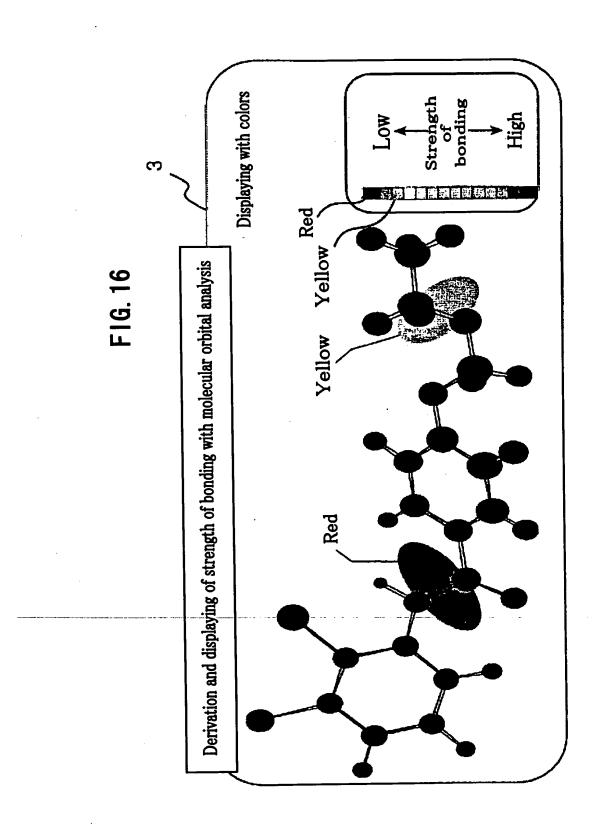


FIG. 15



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FIG. 17

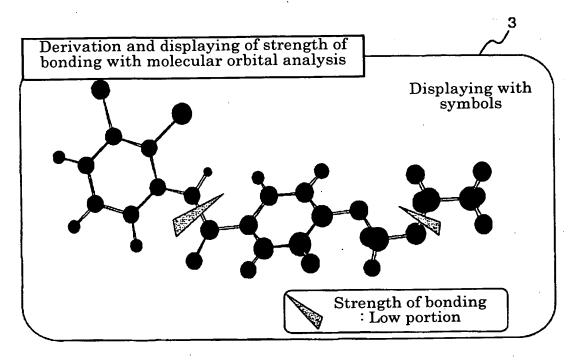
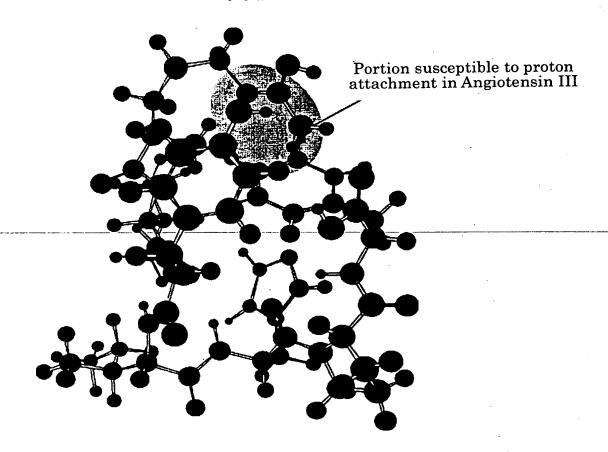


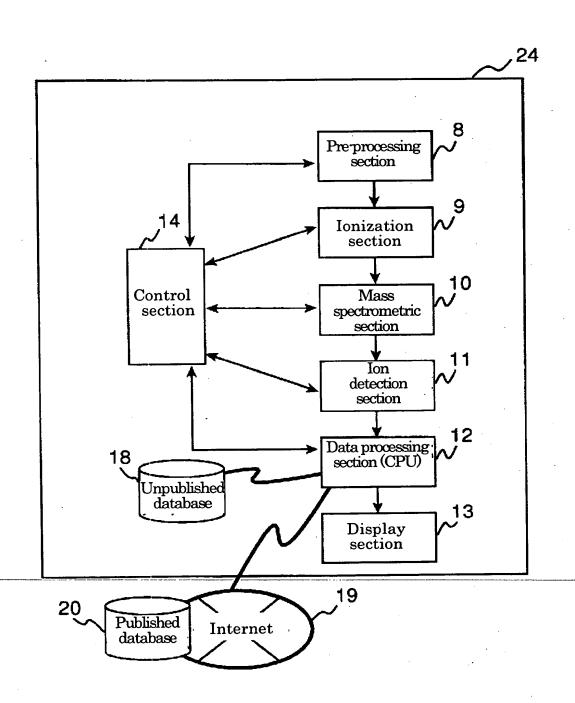
FIG. 18



Arg-Val-Tyr-lle-His-Pro-Phe

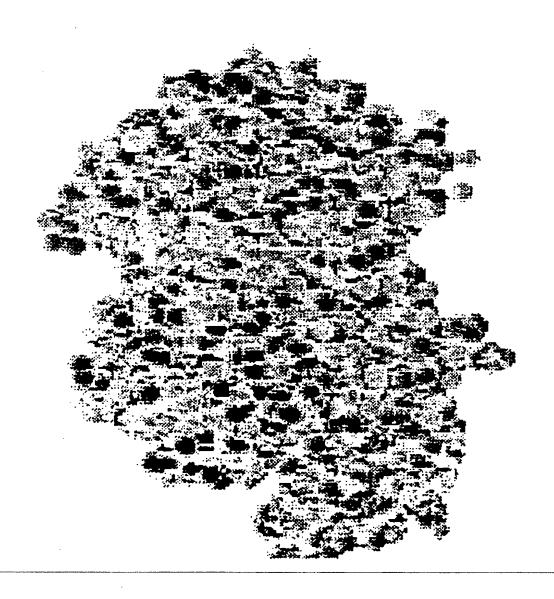
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FIG. 19



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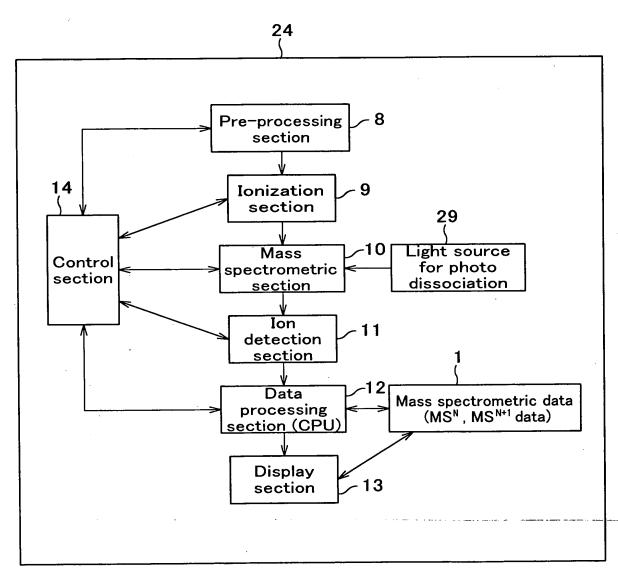
FIG. 20



Three-dimensional displaying of the structure of a protein including the predicted amino acid sequence

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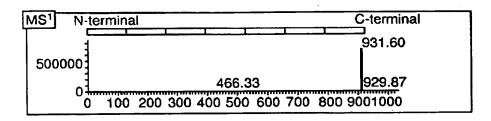
**FIG.21** 

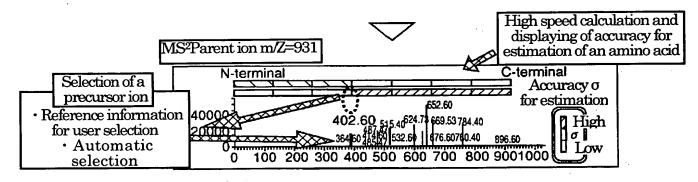


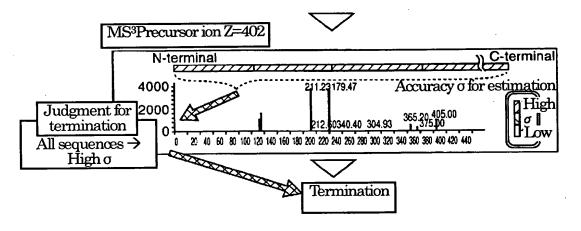
System for Analyzing Mass... EV 324 110 998 US 24 Drawing Sheets; Sheet 19 of 24 **FIG.22** Mass spectrometric data (MSN, MSN+1 data) ԱInitial ∨alue N=1 Estimation of the structure of a precursor ion (MS<sup>N</sup>) 14 Molecular Control section orbital analysis Derivation and displaying of a portion susceptible to separation in the estimated structure of a 26 precursor ion Determination for the Derivation and following mass spectrometry displaying of a N value for MS N dissociated ion m/Z of precursor ion Comparison in the mass spectrometric 6 data of a dissociated ion between analysis and measurement Evaluation of validity of the estimated structure of a precursor ion 25 Evaluation and displaying of accuracy for estimation of the structure of a parent ion Evaluation of validity for 28 the estimated structure of a parent ion (Is the accuracy for estimation of structure higher than X %?) NO YES Termination of MS analysis

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FIG. 23

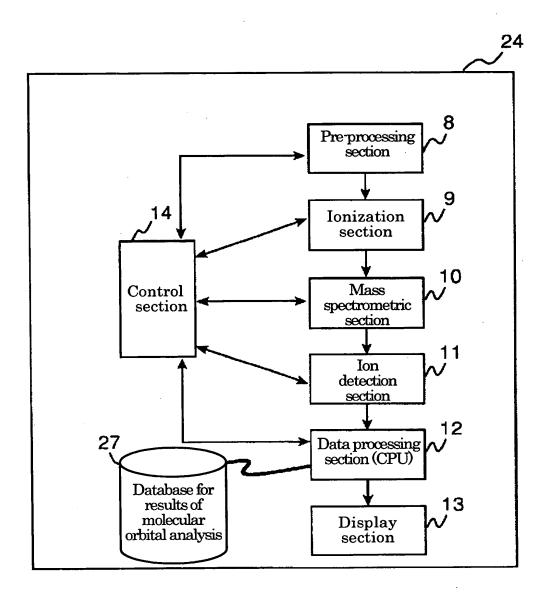






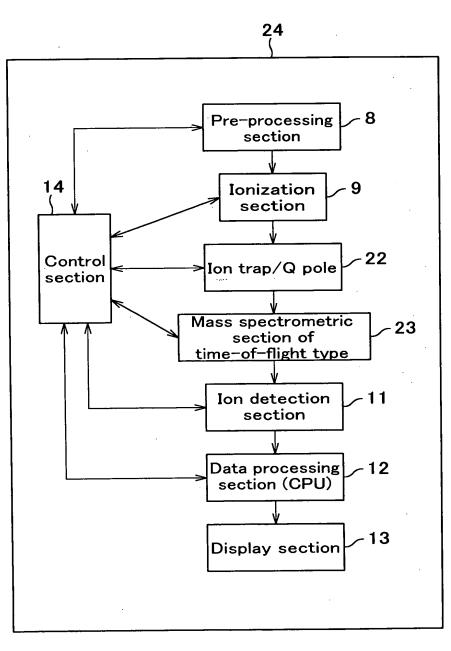
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FIG. 24



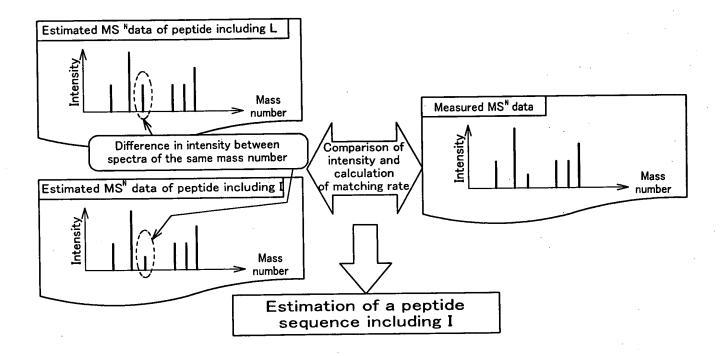
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**FIG.25** 



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**FIG.26** 



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## FIG. 27

Combination of a single amino acid and a pair of amino acids having the same or close mass number

1 Single amino acid	2 A pair of amino acids	Difference of mass number
Trp (186.213),	Glu-Gly (186168)	$\Delta m = 0.0458$
Trp (186.213),	Ala-Asp (186.168)	$\Delta m = 0.0458$
Trp (186.213),	Ser-Val (186.211)	$\Delta m = 0.0024$
Trp (186.213),	Lys-Gly (185.226)	$\Delta m = 0.9872$
Trp (186.213),	Gin-Gly (185.183)	$\Delta m = 1.0305$
Trp (186.213),	Asn-Ala (185.183)	$\Delta m = 1.0305$
Asn (114.104),	Gly-Gly (114.104)	∆ m=0
Lys (128.174),	Gly-Ala (128.131)	$\Delta m = 0.0434$
Gln (128.131),	Gly-Ala (128.131)	Δ m=0
Arg (156.188),	Val-Gly (156.185)	$\Delta m = 0.0031$
Glu (129.116),	Gly-Ala (128.131)	$\Delta m = 0.9847$

 $|\Delta m| < 1.0$ 

( ):Mass number without N and C terminals